

Applied Visit 11/4/98

Matt and I talked to Frank about some of the requirements for the Pirani/ATM switch that is currently made as a special by MKS Vacuum Products Group.

93-7585 Customer Requirements

Indicators

LED indication for 41 series relay status (Labeled "ATM").
LED indication for 325 series relay status (Labeled "VAC").
Indicators are to be green per the IBM specification

Relays

Frank would like capability to use a set point relay from the Pirani sensor. We considered 50 Torr to be a good first stab at a "VAC" set point value.

Pirani Relay output

Frank wants to use the same 9 Pin D-sub that they are currently using instead of a different connector such as the 15 pin HD D-sub. The relay contacts will be run out to the unused pins on the 9-pin Dsub. However, I am sure if this catches on, other groups will want the 15 pin HD D-sub so they do not have to change the wiring harness that they may already have for the 275 Convectron.

Pin Assignment

325 SP COM tied to PIN 7 (93-7585)
325 SP NC tied to PIN 9 (93-7585)

External (USER) Adjustment

Frank would like the ability to adjustment of the set point value of the Pirani sensor. This could be provided if size and cost allow it.

Foreline vacuum Gauge.

Frank was interested in replacing the Edwards Pirani gauge on the foreline. This means a version of the 325 that has essentially a 0-10V output. We have already allowed for the placement of gain resistors on the Hitachi version of the 325 and it is CE marked. However, 1% tolerance resistors produce a significant error beginning around 50 Torr. If this becomes a problem, MKS should plan on actually putting in a trim pot for gain adjust and as well as adding offset adjustment so that the output curve can be "calibrated" to reduce error from the nominal curve. A new part number will be given for the CE marked version of the 325 with a 8-VCR F fitting and an output of 0-10V.

Part Number: 103250031
Description: ASSY, 325,CE,8VCRF,3XOUT